

## CLAIMS

What is claimed is:

1. A method for validating a rear steering angle of a vehicle,  
comprising:  
 receiving a plurality of signals indicative of said rear steering angle;  
 checking at least one of said plurality of signals to determine if it falls  
 within a valid range;  
 correlating at least a first signal of said plurality of signals with at least a  
 second signal of said plurality of signals to determine if either said first  
 signal or said second signal is invalid; and  
 signaling a rejection of any of said plurality of signals found to be  
 invalid.
2. A method as defined in Claim 1, said correlating  
comprising:  
 comparing said first signal with an expected value at about an inflection  
 point of said second signal.
3. A method as defined in Claim 2, said correlating further  
comprising:  
 adding a second rear-wheel angle offset corresponding to said  
 inflection point to a signal corresponding to said second signal in response to  
 said comparing.
4. A method as defined in Claim 3, said correlating further  
comprising:  
 subtracting a center value from said second signal; and  
 multiplying a result of said subtracting by a scale factor.
5. A method as defined in Claim 3, further comprising:  
 computing said expected value with reference to a look-up table.

6. A method as defined in Claim 3, further comprising:  
computing said expected value by evaluating a continuous  
function.

7. A method as defined in Claim 1, said correlating  
comprising:

calculating a steering angle corresponding to one of said first  
signal and said second signal so as to create a calculated angle; and

5 computing an expected value of the other of said first signal and  
said second signal in accordance with said calculated angle.

8. A method as defined in Claim 7, said correlating further  
comprising:

comparing said expected value of said other of said first signal  
and said second signal with an actual value of said other of said first signal and  
5 said second signal.

9. A method as defined in Claim 8, said correlating further  
comprising:

determining that any of said plurality of signals is invalid if said  
expected value and said actual value are not substantially equivalent.

10. A method as defined in Claim 7, wherein at least one of  
said calculating and said computing further comprises using a look-up table.

11. A method as defined in Claim 7, wherein at least one of  
said calculating and said computing further comprises evaluating a continuous  
function.

12. A method as defined in Claim 1, wherein said plurality of  
signals comprises a plurality of signal components of a single carrier signal.

13. A method as defined in Claim 1, wherein said receiving  
further comprises providing a single sensor having two signal outputs.

14. A method as defined in Claim 1, wherein said checking further comprises:

comparing at least one of said plurality of signals with an upper limit; and

5 comparing at least one of said plurality of signals with a lower limit.

15. A storage medium encoded with a machine readable computer program code comprising:

computer code for receiving a plurality of signals indicative of a rear steering angle;

5 computer code for checking at least one of said plurality of signals to determine if it falls outside a valid range and is invalid;

computer code for correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and

10 computer code for signaling a rejection of any of said plurality of signals found to be invalid.

16. A computer data signal comprising:

computer code for receiving a plurality of signals indicative of a rear steering angle;

5 computer code for checking at least one of said plurality of signals to determine if it falls outside a valid range and is invalid;

computer code for correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid; and

10 computer code for signaling a rejection of any of said plurality of signals found to be invalid.

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17. A rear steering system for a vehicle, comprising:  
at least one actuator in operable communication with a pair of  
rear wheels; and

- 5 a controller operably interconnected with said actuator; a  
means for receiving a plurality of signals indicative of a rear  
steering angle of said rear wheels;  
means for checking at least one of said plurality of signals to  
determine if it falls outside a valid range and is invalid;  
means for correlating at least a first signal of said plurality of  
10 signals with at least a second signal of said plurality of signals to determine if  
either said first signal or said second signal is invalid; and  
means for signaling a rejection of any of said plurality of signals  
found to be invalid.

18. A controller for a rear-wheel steering system, the  
controller comprising:

- means for receiving a plurality of signals indicative of a rear  
steering angle;  
5 means for checking at least one of said plurality of signals to  
determine if it falls outside a valid range and is invalid;  
means for correlating at least a first signal of said plurality of  
signals with at least a second signal of said plurality of signals to determine if  
either said first signal or said second signal is invalid; and  
10 means for signaling a rejection of any of said plurality of signals  
found to be invalid.

19. A controller for a rear-wheel steering system, the controller comprising:

at least one input terminal for receiving a plurality of signals indicative of a rear steering angle;

5 at least one comparator for checking at least one of said plurality of signals to determine if it falls outside a valid range and is invalid;

at least one correlation function for correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine if either said first signal or said second signal is invalid;

10 and

at least one output terminal for signaling a rejection of any of said plurality of signals found to be invalid.

20. A method for determining a steering angle comprising:  
receiving a plurality of signals indicative of said steering angle;  
checking at least one of said plurality of signals to determine if it falls within a valid range;

5 correlating at least a first signal of said plurality of signals with at least a second signal of said plurality of signals to determine that neither said first signal or said second signal is invalid;

determining a first value of said steering angle in accordance with said first signal; and

10 determining a second value of said steering angle in accordance with said first value of said steering angle and said second signal in order to obtain a more accurate measurement.